

F1 conclude  
components is indicative that said test compound is a compound which inhibits binding between XRCC4 and DNA ligase IV, or XRCC4 and DNA-PK<sub>cs</sub>/Ku or XRCC4, DNA ligase IV and DNA-PK<sub>cs</sub>/Ku.

F2  
3. (amended) A screening method for identifying a compound which inhibits DNA ligase IV activity, the method including the steps of:

- (i) contacting DNA ligase IV, XRCC4 and a test compound; and
- (ii) determining DNA ligase activity in the presence and the absence of test compound

X,

wherein a decrease in the activity in the presence relative to the absence of test compound is indicative that said test compound is a compound which inhibits the activity of DNA ligase IV.

F3  
6. (amended) A screening method comprising

- (i) contacting a test compound, DNA-PK<sub>cs</sub> and XRCC4; and
- (ii) determining phosphorylation of said XRCC4 in the presence and the absence of the test compound;

wherein a decrease in phosphorylation in the presence relative to the absence of the test compound is indicative that said test compound inhibits the phosphorylation of XRCC4 by DNA-PK<sub>cs</sub>.

F4  
19. (amended) A method comprising obtaining a compound which inhibits the binding between XRCC4 and DNA ligase IV, or XRCC4 and DNA-PK<sub>cs</sub>/Ku, or XRCC4 and DNA ligase IV and DNA-PK<sub>cs</sub>/Ku, employing a method according to claim 1; and, formulating said compound into a composition which comprises a pharmaceutically acceptable excipient.

F5  
22. (amended) A method comprising obtaining a compound which inhibits DNA ligase IV activity employing a method according to claim 3 and formulating said compound into a composition which comprises a pharmaceutically acceptable excipient.

F6  
25. (amended) A method comprising obtaining a compound which inhibits DNA-PK<sub>cs</sub>/Ku phosphorylation of XRCC4 employing a method according to claim 6 and formulating said compound into a composition which comprises a pharmaceutically acceptable excipient.